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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,087	11/07/2001	Osamu Kawamae	520.36525CX2	4764
24956	7590	10/04/2005	EXAMINER	
MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			HOANG, THAI D	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/986,087	Applicant(s) KAWAMAE ET AL.	
	Examiner Thai D. Hoang	Art Unit 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed 11/07/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/17/02</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

(a) Claims 21-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of U. S. Patent No.

6,404,781 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 21 and 26 of the application merely broaden claims 1 and 7 of the patent by modifying the first limitation and using a general term "additional information" instead of a specific CRC code as recited in claims 1 and 7 of the patent.

Claims 22 and 28 of the application merely broaden claims 2 and 9 of the patent by omitting the last limitation.

Claim 23 of the application merely broaden claims 2 and 9 of the patent by omitting the last limitation.

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Claims 24-25 of the application merely broaden claims 3 and 6 of the patent by modifying limitations as indicated in claims 21 and 26.

Claims 27 and 29 of the application merely broaden claims 8 and 11 of the patent by modifying limitations as indicated in claims 21 and 26.

Claims 30 and 31 of the application merely broaden claims 13 and 14 of the patent, respectively, by omitting the last limitation.

It has been held that the omission an element and its functions is an obvious expedient if the remaining elements perform the same as before. *In re Karlson*, 136 USPQ 184 (CCPA). Also, note *Ex parte Rainu*, 168 USPQ 375 (Bd.App.1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

(b) Claims 21-22 and 24-31 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7-9, 16-18 and 21-31 of copending Application No. 09/986090. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 21 and 26 of the application merely broaden claims 7, 16 and 23 of the copending Application No. 09/986090 by modifying the step of "altering at least part of the data frame in accordance with predetermined patterns" recited in claims 8 and 18 of the copending Application with "embedding said additional information data" into data frame.

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Claims 22 and 28 of the application merely broaden claims 8 and 18 of the copending Application No. 09/986090 by modifying the step of determining the additional information recited in the last limitation.

Claims 24-25 of the application merely broaden claims 9 and 25-27 of copending Application No. 09/986090 by modifying the second limitation as mentioned in claims 21 and 22 above.

Claim 27 of the application merely broaden claim 17 of copending Application No. 09/986090 by modifying the second limitation as mentioned in claims 21 and 26 above.

Claim 29 of the application merely broaden claim 24 of copending Application No. 09/986090 by modifying the second limitation as mentioned in claims 21 and 26 above.

Claim 30 of the application merely broaden claim 21 of the copending Application No. 09/986090 by eliminating the step of encoding data "in accordance with a predetermined conversion table" recited in the last limitation.

Claim 31 of the application merely broaden claim 22 of the copending Application No. 09/986090 by eliminating encoding step mentioned in claim 30 above.

It has been held that the omission an element and its functions is an obvious expedient if the remaining elements perform the same as before. *In re Karlson*, 136 USPQ 184 (CCPA). Also, note *Ex parte Rainu*, 168 USPQ 375 (Bd.App.1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-31 are rejected under 35 U.S.C. 102(b) as being unpatentable by Yoshinaka, US Patent No. 5,384,787.

Regarding claims 21, 26 and 30-31, Yoshinaka discloses a system called “Picture data recording apparatus and picture data reproducing apparatus”. Yoshinaka discloses the system comprise a block 31, which serves to divide picture data into data frames data every block of 8x8 pixels, as shown in FIG. 2, with respect to picture data delivered from the A/D converter 2 to output picture data to which shuffling processing is implemented. See col. 5, lines 39-41, figures 1 and 2 (preparing data frames of said information data into which the additional information data are to be embedded). Also, Yoshinaka teaches that the coding processing unit 3 compresses picture data of 800x400 bytes/frames (fig. 2) to deliver to the recording data processing unit 4. In the recording data processing unit 4, the ID adding circuit 41 is supplied with picture data coded by the coding processing unit 3 and an identification code (ID) indicating its quantization step width is included in the ID signal added to the picture data. Col. 6, lines 28-35 (embedding said additional information data plural times into said data

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frame, repetitively). Then, both ID data and picture data are transmitted to the recorder 5, fig. 2 (transmitting the information data embedded with the repetitive additional information data).

Regarding claims 22 and 28, Yoshinaka discloses a receiver for reproducing recorded data in figure 5. This reproducing system comprises a magnetic head 7 for receiving and tracing recording tracks of the recording medium 6 on which picture data is recorded by the picture data recording apparatus as shown in figure 1, col. 8, lines 7-11 (receiving the transmitted information data embedded with the repetitive additional information data therein). Also, the reproducing recorded data comprises an ID detector 85 detects an identification code (ID) which is embedded in the received data (detecting the repetitive additional information data embedded from said transmitted information data, determining said additional information data based on repetitiveness of the additional information data detected).

Regarding claims 24-25, Yoshinaka discloses the system relates to a picture data recording apparatus for recording picture data onto a recording medium such as a magnetic tape or an optical disk, etc. and a picture data reproducing apparatus for reproducing picture data recorded on the recording medium, col. 1, lines 7-12. Therefore, the recorded data comprises video, audio and other embedded data (wherein said information data includes at least one of video data, audio data and text data.)

Regarding claims 27-29, Yoshinaka discloses the system relates to a picture data recording apparatus for recording picture data onto a recording medium such as a

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magnetic tape or an optical disk, etc., col. 1, lines 7-9. In addition, Yoshinaka discloses the video/audio data and embedded data output from the recording data processing unit 4 are recorded in recording medium 5 and 6, see figure 1 (means for recording the information data embedded with the repetitive additional information data onto an optical information recording medium.)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to the application:

US Patent No. 6005643 A, Morimoto et al., "Data hiding and extraction methods."

US Patent No. 5623467 A, Kato et al., "Data recording apparatus for recording data in sector units."

US Patent No. 5745505 A, Yonemitsu et al., "Digital signal encoding method and apparatus, digital signal recording medium, and digital signal decoding method and apparatus."

US Patent No. 5991502 A, Kawakami et al., "Optical recording device which calculates distances between I-frames and records I-frame addresses in a sector."

US Patent No. 5881037 A, Takana et al., "Recording medium, recording method and apparatus, and reproduction method and apparatus."


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D. Hoang whose telephone number is (571) 272-3184. The examiner can normally be reached on Monday-Friday 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thai Hoang


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2667 9/29/05